

# **11 MEASURING STUDENT SUCCESS WITH AN IMPROVED DATA SYSTEM**

## **Overview**

Detailed information about student success is essential to understand current trends and plan for future improvements. However, Washington, unlike many other states, lacks the coordinated data system needed by state policy makers.

In its 2004 Strategic Master Plan for Higher Education, the Higher Education Coordinating Board calls for a student unit record data system to evaluate progress toward state goals and to identify and eliminate barriers to student success. A statewide data system will allow board staff to address several problems and inaccuracies now caused by storing data separately at each institution.

For example, not all colleges interpret data requests consistently or calculate “graduation efficiency” the same way, which leads to inaccurate comparisons between institutions. In addition, graduation rates now categorize students as dropouts if they leave one four-year college but graduate from another. Linking four-year unit record data statewide would enable board staff to accurately count these students as successful.

## **Analysis**

The new statewide student-level database would include data about all students at every stage of college – from submitting the college application and deciding where to enroll to choosing a major and earning a degree. Student-level data from colleges and universities could be linked to data from other state agencies, such as the Department of Employment Security, to answer questions about the return on the state’s investment in higher education and economic responsiveness. Data from colleges and universities also could be linked or combined with data from preschool through 12th grade, as is now done in Texas.

### ***A lack of complete and accessible data***

A few data sources currently exist in Washington, but none are sufficient to meet state needs.

- ***Data from Washington public colleges and universities:*** HECB staff collects information from the public colleges and universities for various reports and projects. The process is inefficient and time-consuming and data often are not comparable, as each institution defines information requests slightly differently.

- **National survey data:** HECB staff partially depends upon the Integrated Postsecondary Education Data System (IPEDS) and other national surveys as data sources. However, these data are not available at the student level.
- **Office of Financial Management (OFM):** OFM staff collects and uses student-level data to report enrollment and other higher education statistics. However, board staff does not have access to the raw data. And the OFM database does not contain information about student outcomes, such as grades or degrees.
- **State Board for Community and Technical Colleges (SBCTC):** SBCTC staff collects detailed student-level information on all students attending Washington community and technical colleges. Higher Education Coordinating Board staff cannot access the data. And information about students who attend private or public four-year institutions is not included in the data.
- **Unit record for need-based aid recipients:** HECB staff collects student-level data about students who receive need-based aid in Washington. But the data are based on only a subset of students attending the state's colleges and do not include information about outcomes, such as grades or degrees.

### ***Most states have student-level databases***

In a 2003 review of other state record systems, the National Center for Higher Education Management Systems reported the following:<sup>1</sup>

- Thirty-seven states have established operational student-level databases, which are managed by either a state university system or state higher education coordinating/governing board;
- Twelve states include some information on private colleges and universities in their databases; and
- About one-half of states also link to other state-level databases, including high school records and wage records.

<sup>1</sup> Peter T. Ewell, Paula R. Schild, and Karen Paulson, National Center for Higher Education Management Systems, "Following the Mobile Student: Can We Develop the Capacity for a Comprehensive Database to Assess Student Progression?" Lumina Foundation for Education Research Report, April 2003.

## **Implementation Plan**

**1. Develop a statewide four-year college student unit record data warehouse -- similar to the data warehouse used by the state's community and technical colleges and those developed in many other states. OFM has agreed to collect the data, in consultation with COP and HECB staff.**

**By December 2004, COP, OFM and HECB staff** will create a Memorandum of Understanding for sharing, protecting, and accessing data.

**By June 2005, HECB staff**, in consultation with OFM staff and the Data Advisory Group, will select a model for collecting and standardizing data. (The Data Advisory Group, required by House Bill 3103 [Sec. 12], is composed of representatives from public and independent colleges and universities and other state agencies.) The staff and advisory group also will identify policy questions and research projects to be completed during the following two years and submit the prioritized list to the HECB for approval. Some of the priorities will address routine information requests by the legislature, while others will focus on long-term projects that, for example, could track student progress over time and analyze how various factors affect their success.

**By September 2005, public four-year colleges and universities** will begin submitting outcomes data to OFM. HECB and OFM staff will use the list of prioritized policy questions and projects to begin testing the data.

**By December 2005, OFM and HECB staff** will have tested the data and developed prototype reports, ongoing routines, and standards for continuing to collect data on a regular basis.

**By February 2006, HECB staff** will begin using the data on a regular basis to answer routine questions and to conduct research and produce reports according to the priorities set in June 2005. In consultation with the Data Advisory Group, HECB staff will develop a report schedule for long-term research projects and a survey to determine whether users find the reports and data useful.

**By March 2006, HECB and OFM staff and the Data Advisory Group** will revise the prioritized project list, seeking HECB approval as necessary. Users will be surveyed. The Data Advisory Group will continue to meet regularly to review survey results, prioritize projects, and discuss and resolve any data issues or problems.

***Performance measures***

- Research priorities will be set in consultation with the Data Advisory Group and approved by the HECB.
- At least half of all legislative inquiries will be answered within 48 hours. (Currently, most inquiries require the HECB to survey each institution separately and can take weeks to complete.)
- Users will rate the reports and data provided by the HECB for its usefulness, accuracy, and timeliness.

***Estimated costs***

First-year costs of \$317,500 will be required for equipment and technical/project management staff. Ongoing annual costs of \$182,500 will include salaries for technical/project management staff.

A minimal allocation of 0.25 FTE at each public four-year college and university is included in the costs listed above. Since each four-year institution now submits enrollment data on an ongoing basis to the Office of Financial Management, it is not expected that a substantial additional reporting burden would be required in order to submit similar (or identical) data to the HECB or to supplement it with outcomes data (e.g., grades and degrees). If this proves to be an incorrect assumption, cost estimates will be adjusted.

***Examples of ongoing related work***

- In June 2004, a Data Advisory Group, required under House Bill 3103, was formed that includes representatives from various agencies, colleges, and universities. The group has reviewed the data each organization currently stores and links to other sources.
- In August 2004, the HECB requested funding for this initiative in its proposed 2005-07 operating budget.

***2. Implement data links between four-year college data and other sources to conduct research for use in policy and improving programs. For example, links would enable the tracking and analysis of data regarding student academic performance and employment.***

***By June 2006, the Data Advisory Group and HECB staff*** will identify potential data linkages, develop a list of prioritized policy questions and research projects to be completed during the following two years and revise or develop agreements for sharing, protecting, and accessing linked data.

**By September 2006, HECB staff** will submit the list of prioritized projects to the HECB for approval. The Data Advisory Group will assist in developing protocols, standards, and routines for regularly linking data between agencies and schools. HECB staff will begin linking and testing the new data.

**By December 2006, HECB staff, in consultation with the Data Advisory Group,** will develop a reporting schedule and user survey. The group will review and discuss any draft reports produced by the HECB staff and resolve any data problems.

**By March 2007, HECB staff** will begin regularly producing reports using the linked data. Users will be surveyed. Other linkages will be explored. The list of prioritized projects will be revisited and adjusted as necessary. The Data Advisory Group will continue to meet on a quarterly basis to discuss user feedback, prioritize future projects, and resolve data problems.

### ***Performance measures***

Once the database is fully developed, data will be published annually to help policy makers and state residents evaluate the contribution of higher education to the educational, economic, and civic conditions of Washington State. Surveys will be issued to measure the usefulness of these reports.

### ***Estimated costs***

No costs have been identified for the data-linking portion of this project. If costs exceed expectations, they will be included in budget requests in future biennia.

### ***Examples of ongoing related work***

The Data Advisory Group convened in June 2004 and discussed potential data linkages. During the summer of 2004, HECB staff interviewed individual advisory group members, who advised HECB staff to begin by linking the four-year college data together and creating a data warehouse. The next step would involve linking the four-year college data to other data sources controlled by agencies such as the State Board for Community and Technical Colleges and the Department of Employment Security.

